

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,129	04/18/2001	Misaki Ishida	3274-010528	7371

7590

06/04/2002

Kent E. Baldauf
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818

EXAMINER

WILLIS, MICHAEL A

ART UNIT

PAPER NUMBER

1617

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,129

Applicant(s)

ISHIDA ET AL.

Examiner

Michael A. Willis

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment of 28 January 2002 is entered. Claims 1 and 2 are amended. Claims 8-14 are added. Claims 1-14 are pending. Any previous rejections that are not restated in this Office Action are hereby withdrawn. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

Newly submitted claims 8-14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 8-14 are drawn to a method for whitening human skin, while originally presented claims 1-3 are drawn to a composition, and claims 4-7 are drawn to a method for isolating and purifying polymethoxyflavone.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 8-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

Claims 4-7 are rejected under 35 USC 103(a) as being unpatentable over Machida et al (Chem. Pharm. Bull., vol. 37, no. 4, pp. 1092-1094) in view of

Williamson (Macroscale and Microscale Organic Experiments, 1989, pp. 116-118 and 152-153) for reasons as stated previously.

While Applicant concedes that it is well-known in the art that there are many solvent candidates for extracting a desired compound and that two or more solvents may be used in combination, Applicant argues that there are an infinite number of candidate solvents for each step of an extraction and purification. Therefore, Applicant argues that it would not have been obvious to select the specific solvents as claimed. Applicant asserts that it is very difficult and not at all obvious to select the particular solvents and ratios as claimed. Applicant summarizes the Examiner's position as being "obvious to try" various solvents and combinations from an infinite list to accomplish the present extraction. Applicant concludes by citing numerous cases, and stating that courts have consistently refused to recognize "obvious to try" rejections.

With respect to applicant's suggestion that there are an infinite number of possible solvents to use in an extraction/purification process, the examiner respectfully disagrees. When applied to a "real world" laboratory setting, and adjusted for the practical considerations of cost, safety, boiling point, polarity, and ready availability, the actual number of solvents is reduced to a mere handful of choices (see Table 10.2 of Williamson). Because it is not possible to predict from first principles which solvent system will work best for any specific compound, one of ordinary skill in the art is always motivated to try a variety of solvent systems in order to arrive at an optimized system for a particular compound. In fact, the process of selecting a solvent system for extraction and/or

chromatography is one of the first laboratory lessons learned by the student of organic chemistry. In response to applicant's arguments with respect to "obvious to try", it is the position of the examiner that obviousness exists if the prior art indicates both the critical parameters, and gives direction as to which of the choices is likely to be successful. *Merck & Co. Inc. v. Biocraft Labs, Inc.* (CAFC 1989) 874 F2d 804, 10 PQ 2d 1843. In the case at hand, solvent polarity is the critical parameter, and Table 10.2 of Williamson indicates choices likely to be successful. Finally, to apply a general extraction process of the prior art to a particular starting material and determine the optimum conditions of operation which are most suitable for that starting material has been held not to involve patentable invention. *Ex parte Goldschmidt et al.* (POBA 1959) 123 USPQ 41.

The following new grounds of rejection are made:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Claim 1 is rejected for being indefinite due to the term "derivatives". The term is not defined in the specification, such that one of ordinary skill in the art would not be apprised of the scope of the instant claims. Any remaining claims are rejected as depending from indefinite base claims.

Claim Rejections - 35 USC § 102

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Swift (US Pat. 3,598,841) as supported by Mezoff (US Pat. 3,771,535). Swift discloses that nobiliten is present in oranges at levels as high as 0.1 grams per liter (see col. 1, lines 30-35). Ascorbic acid, also known as vitamin C, is inherently present in oranges. Mezoff discloses that an orange contains roughly 50 mg of vitamin C (see col. 1, lines 1-10). It is noted that the rejection is based on Swift, and that Mezoff is cited merely to show that vitamin C is inherently present in oranges. The preamble term "cosmetic" is not given patentable weight.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

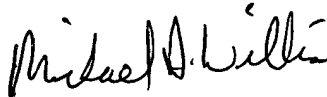
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

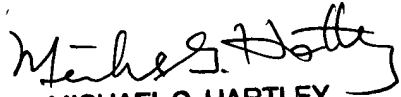
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Willis whose telephone number is (703) 305-1679. The examiner can normally be reached on alternate Mon. and Tues. to Fri. from 9am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minna Moezie can be reached on (703) 308-4612. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.


Michael A. Willis
Examiner
Art Unit 1617

June 2, 2002


MICHAEL G. HARTLEY
PRIMARY EXAMINER